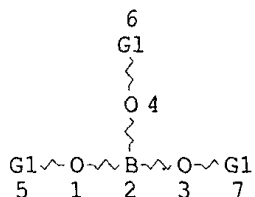


<b>L Number</b>	<b>Hits</b>	<b>Search Text</b>	<b>DB</b>	<b>Time stamp</b>
<b>1</b>	<b>402572</b>	<b>paper</b>	<b>USPAT; US-PGPUB</b>	<b>2002/12/16 16:08</b>
<b>2</b>	<b>358808</b>	<b>paper and (product or method or process)</b>	<b>USPAT; US-PGPUB</b>	<b>2002/12/16 16:09</b>
<b>3</b>	<b>91387</b>	<b>(paper and (product or method or process)) and (fabric or wire)</b>	<b>USPAT; US-PGPUB</b>	<b>2002/12/16 16:09</b>
<b>4</b>	<b>14171</b>	<b>((paper and (product or method or process)) and (fabric or wire)) and suspension</b>	<b>USPAT; US-PGPUB</b>	<b>2002/12/16 16:10</b>
<b>5</b>	<b>1145</b>	<b>((((paper and (product or method or process)) and (fabric or wire)) and suspension) and borate</b>	<b>USPAT; US-PGPUB</b>	<b>2002/12/16 16:10</b>
<b>6</b>	<b>1527</b>	<b>((((paper and (product or method or process)) and (fabric or wire)) and suspension) and (borate or boric)</b>	<b>USPAT; US-PGPUB</b>	<b>2002/12/16 16:11</b>
<b>7</b>	<b>1503</b>	<b>(((((paper and (product or method or process)) and (fabric or wire)) and suspension) and (borate or boric)) and acid</b>	<b>USPAT; US-PGPUB</b>	<b>2002/12/16 16:12</b>
<b>8</b>	<b>1168</b>	<b>(((((paper and (product or method or process)) and (fabric or wire)) and suspension) and (borate or boric)) and acid) and pH</b>	<b>USPAT; US-PGPUB</b>	<b>2002/12/16 16:12</b>
<b>9</b>	<b>1141</b>	<b>((((((paper and (product or method or process)) and (fabric or wire)) and suspension) and (borate or boric)) and acid) and pH) and temperature</b>	<b>USPAT; US-PGPUB</b>	<b>2002/12/16 16:13</b>
<b>10</b>	<b>524</b>	<b>((((((((paper and (product or method or process)) and (fabric or wire)) and suspension) and (borate or boric)) and acid) and pH) and temperature) and boric adj acid</b>	<b>USPAT; US-PGPUB</b>	<b>2002/12/16 16:13</b>
<b>11</b>	<b>321</b>	<b>(((((((((paper and (product or method or process)) and (fabric or wire)) and suspension) and (borate or boric)) and acid) and pH) and temperature) and boric adj acid) and fibers</b>	<b>USPAT; US-PGPUB</b>	<b>2002/12/16 16:14</b>
<b>12</b>	<b>113</b>	<b>((((((((((paper and (product or method or process)) and (fabric or wire)) and suspension) and (borate or boric)) and acid) and pH) and temperature) and boric adj acid) and fibers) and cellulosic</b>	<b>USPAT; US-PGPUB</b>	<b>2002/12/16 16:14</b>
<b>13</b>	<b>24</b>	<b>((((((((((((paper and (product or method or process)) and (fabric or wire)) and suspension) and (borate or boric)) and acid) and pH) and temperature) and boric adj acid) and fibers) and cellulosic) and basis adj weight</b>	<b>USPAT; US-PGPUB</b>	<b>2002/12/16 16:15</b>
<b>14</b>	<b>9</b>	<b>((((((((((((((paper and (product or method or process)) and (fabric or wire)) and suspension) and (borate or boric)) and acid) and pH) and temperature) and boric adj acid) and fibers) and cellulosic) and basis adj weight) and (malodor or odor)</b>	<b>USPAT; US-PGPUB</b>	<b>2002/12/16 16:26</b>

15	27496	borate or boric adj acid	EP ; JP ; DERWENT	2002/12/16 16:27
16	1	(borate or boric adj acid) and cellulosic adj paper	EP ; JP ; DERWENT	2002/12/16 16:28
17	34	(borate or boric adj acid) and cellulosic same paper	EP ; JP ; DERWENT	2002/12/16 16:40
18	44182	odor or malodor	EPO; JPO; DERWENT	2002/12/16 16:40
19	2182	(odor or malodor) and paper	EPO; JPO; DERWENT	2002/12/16 16:40
20	0	((odor or malodor) and paper ) and sispension	EPO; JPO; DERWENT	2002/12/16 16:40
21	34	((odor or malodor) and paper ) and suspension	EPO; JPO; DERWENT	2002/12/16 16:42
22	1	((odor or malodor) and paper ) and suspension) and (borate or boric adj acid)	EPO; JPO; DERWENT	2002/12/16 16:43
23	1	za-8509811-\$.did.	EPO; JPO; DERWENT	2002/12/16 16:44
24	44649	odor or malodor	USPAT; US-PGPUB	2002/12/16 16:44
25	29556	(odor or malodor) and (borate or boric acid)	USPAT; US-PGPUB	2002/12/16 16:45
26	28966	((odor or malodor) and (borate or boric acid)) and (paper or process or method)	USPAT; US-PGPUB	2002/12/16 16:46
27	22775	((odor or malodor) and (borate or boric acid)) and (paper or process or method)) and (hydrogen or carbon)	USPAT; US-PGPUB	2002/12/16 16:47
28	5975	((odor or malodor) and (borate or boric acid)) and (paper or process or method)) and (hydrogen or carbon)) and sheet	USPAT; US-PGPUB	2002/12/16 16:47
29	1097	((odor or malodor) and (borate or boric acid)) and (paper or process or method)) and (hydrogen or carbon)) and sheet) and web	USPAT; US-PGPUB	2002/12/16 16:48
30	1036	((odor or malodor) and (borate or boric acid)) and (paper or process or method)) and (hydrogen or carbon)) and sheet) and web) and temperature	USPAT; US-PGPUB	2002/12/16 16:48
31	559	((odor or malodor) and (borate or boric acid)) and (paper or process or method)) and (hydrogen or carbon)) and sheet) and web) and temperature) and pH	USPAT; US-PGPUB	2002/12/16 16:48
32	101	((odor or malodor) and (borate or boric acid)) and (paper or process or method)) and (hydrogen or carbon)) and sheet) and web) and temperature) and pH) and air adj dried	USPAT; US-PGPUB	2002/12/16 16:57
33	52	((odor or malodor) and (borate or boric acid)) and (paper or process or method)) and (hydrogen or carbon)) and sheet) and web) and temperature) and pH) and air adj dried) and tissue	USPAT; US-PGPUB	2002/12/16 17:00

34	27	((((((((odor or malodor) and (borate or boric acid)) and (paper or process or method)) and (hydrogen or carbon)) and sheet) and web) and temperature) and pH) and air adj dried) and tissue) and boric adj acid	USPAT; US-PGPUB	2002/12/16 17:06
35	23019	162/\$.ccls.	USPAT; US-PGPUB	2002/12/16 17:07
36	307	162/\$.ccls. and (borate or boric adj acid)	USPAT; US-PGPUB	2002/12/16 17:07
37	32	(162/\$.ccls. and (borate or boric adj acid)) and odor	USPAT; US-PGPUB	2002/12/16 17:18
38	0	((162/\$.ccls. and (borate or boric adj acid)) and odor) and Tameka	USPAT; US-PGPUB	2002/12/16 17:18
39	1	Tameka.in.	USPAT; US-PGPUB	2002/12/16 17:19
40	662	spence.in.	USPAT; US-PGPUB	2002/12/16 17:19
41	110	spence.in. and (paper or papermaking)	USPAT; US-PGPUB	2002/12/16 17:20
42	50	( spence.in. and (paper or papermaking)) and bor\$4	USPAT; US-PGPUB	2002/12/16 17:24
43	2	( spence.in. and (paper or papermaking)) and boric adj acid	USPAT; US-PGPUB	2002/12/16 17:24
-	1	3304056.pn.	USPAT; US-PGPUB	2002/10/16 14:47
-	1	1829674.pn.	USPAT; US-PGPUB	2002/10/16 12:06
-	0	5509536.pn.	USPAT; US-PGPUB	2002/10/16 14:48
-	0	5509536.pn.	USPAT; US-PGPUB	2002/10/16 14:49

=> d que; file reg; file caplus; d ibib abs hitstr 1 2 3 4 7 11 16 21 23 24 25 27  
28 29 30 31 32 34 35 36 37 42 117  
L4 STR



VAR G1=H/AK  
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DEFAULT MLEVEL IS ATOM  
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:  
RING(S) ARE ISOLATED OR EMBEDDED  
NUMBER OF NODES IS 7

STEREO ATTRIBUTES: NONE  
L6 3394 SEA FILE=REGISTRY SSS FUL L4  
L8 27659 SEA FILE=CAPLUS ABB=ON L6  
L14 38591 SEA FILE=CAPLUS ABB=ON PLU=ON PAPER(4A) (PREPN OR PREPARATION?  
OR PRODUCTION OR MANUFACTURE) OR PAPER-MAKING OR PAPERMAKING  
L15 22 SEA FILE=CAPLUS ABB=ON PLU=ON L8(L) (L14)  
L16 36 SEA FILE=CAPLUS ABB=ON PLU=ON BORIC ACID(L) (L14)  
L18 20 SEA FILE=CAPLUS ABB=ON PLU=ON L16 NOT L15

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Experimental and calculated property data are now available. See HELP  
PROPERTIES for more information. See STNote 27, Searching Properties  
in the CAS Registry File, for complete details:  
<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

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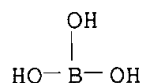
FILE COVERS 1907 - 18 Dec 2002 VOL 137 ISS 25  
FILE LAST UPDATED: 17 Dec 2002 (20021217/ED)

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L17 ANSWER 1 OF 42 CAPLUS COPYRIGHT 2002 ACS  
ACCESSION NUMBER: 2002:636753 CAPLUS  
DOCUMENT NUMBER: 137:171260  
TITLE: Method of preparation of antifouling paper  
INVENTOR(S): Takafuji, Yasutane  
PATENT ASSIGNEE(S): Medic K. K., Japan; I.S.C.G. K. K.  
SOURCE: Jpn. Kokai Tokkyo Koho, 4 pp.  
CODEN: JKXXAF  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	JP 2002235297	A2	20020823	JP 2001-27114	20010202
AB	The method is carried out by adding a calcined dravite mineral, a compd. selected from <b>boric acid</b> , Na borate, and K borate, and TiO <sub>2</sub> in pulp and <b>papermaking</b> .				
IT	<b>10043-35-3, Boric acid</b> , uses RL: MOA (Modifier or additive use); USES (Uses) (method of <b>prepn.</b> of antifouling <b>paper</b> )				
RN	10043-35-3 CAPLUS				
CN	Boric acid (H <sub>3</sub> BO <sub>3</sub> ) (6CI, 8CI, 9CI) (CA INDEX NAME)				

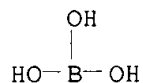


L17 ANSWER 2 OF 42 CAPLUS COPYRIGHT 2002 ACS

KOROMA EIC1700

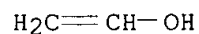
ACCESSION NUMBER: 2001:18838 CAPLUS  
 DOCUMENT NUMBER: 134:63941  
 TITLE: Manufacture of ink-jet printing paper  
 INVENTOR(S): Suzuki, Katsuyoshi; Kobayashi, Takashi  
 PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	JP 2001001631	A2	20010109	JP 1999-170701	19990617
AB	The paper, comprising a substrate coated with an ink-receiving layer, is manufd. by the following steps; (1) coating a soln. contg. inorg. fine particles and water-sol. resin on a substrate with Cobb sizing degree .1toreq.25g/m2, (2) drying the layer to become the solid. component d. 15-40 wt.% before the layer shows decreasing drying rate, (3) applying a crosslinking agent on the coating layer, and (4) drying for curing the layer. The paper shows good ink drying property and high gloss.				
IT	142517-79-1P, Boric acid-vinyl alcohol copolymer RL: PNU (Preparation, unclassified); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (manuf. of ink-jet printing paper showing good ink drying property)				
RN	142517-79-1 CAPLUS				
CN	Boric acid (H3BO3), polymer with ethenol (9CI) (CA INDEX NAME)				
CM	1				
CRN	10043-35-3				
CMF	B H3 O3				



CM 2

CRN 557-75-5  
 CMF C2 H4 O

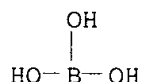


L17 ANSWER 3 OF 42 CAPLUS COPYRIGHT 2002 ACS  
 ACCESSION NUMBER: 2000:654888 CAPLUS  
 DOCUMENT NUMBER: 133:209523  
 TITLE: Preparation method of waterproof and moistureproof paper  
 INVENTOR(S): Park, Hyun-jong

KOROMA EIC1700

PATENT ASSIGNEE(S): Lee, Kul-Koo, S. Korea  
 SOURCE: Repub. Korea, No pp. given  
 CODEN: KRXXFC  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Korean  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	KR 9615819	B1	19961121	KR 1993-16906	19930828
AB	The waterproof and moistureproof paper is produced by (1) (i) adding chain terminators and ammonium peroxide to vinylic monomers such as Et acrylate, styrene, acrylic acid, 2-hydroxyethyl acrylate to prep. a latex by emulsion polymn. and (ii) sep., mixing and heating paraffin chloride of Cl content 40-60% with satd. fatty acids of m.p. 60-80.degree. and adding an aq. soln. contg. activators and sodium borate to prep. a wax emulsion; (2) mixing 80-40% the latex with 20-60% the wax emulsion; (3) emulsifying the mixt. with water contg. plasticizers 1-5, unionized surfactants 2-3, and inorg. emulsifiers 1.5-2.5% (as 30% emulsified materials per 100% the mixt.), changing high m.p. satd. fatty acid fine particles dispersed in the emulsion into hydrophilic property by caustic alkali, and forming an emulsion dispersed with ultrafine particle having diams. .ltoreq.0.05 Pm; and then (4) applying 1-30 g the emulsion per 1 m2 fibrous substrate.				
IT	13840-56-7, Sodium borate RL: TEM (Technical or engineered material use); USES (Uses) (prepn. of waterproof and moistureproof paper by treating with emulsions contg. acrylic and/or styrenic polymers, paraffin waxes, satd. fatty acids, and)				
RN	13840-56-7 CAPLUS				
CN	Boric acid (H3BO3), sodium salt (8CI, 9CI) (CA INDEX NAME)				



x Na

L17 ANSWER 4 OF 42 CAPLUS COPYRIGHT 2002 ACS  
 ACCESSION NUMBER: 2000:542245 CAPLUS  
 DOCUMENT NUMBER: 133:142654  
 TITLE: Manufacture of ink-jet printing paper  
 INVENTOR(S): Sunada, Munekatsu  
 PATENT ASSIGNEE(S): Canon Inc., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000218934	A2	20000808	JP 1999-27390	19990204

KOROMA EIC1700

AB In manuf. of ink-jet printing paper by coating a soln. contg. alumina hydrate, a binder, and a crosslinking agent on a substrate, the coating soln. is continuously compounded by supplying the binder and the crosslinking agent sep., and successively coated on the substrate. The manufd. printing paper is also claimed. The coating soln. has low viscosity because the reaction of the binder and the crosslinking agent is prevented before coating and thick ink receiving layer with good ink absorption is obtained uniformly.

IT **142517-79-1P, Boric acid**-vinyl alcohol copolymer  
 RL: PNU (Preparation, unclassified); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (manuf. of ink-jet printing **paper** by coating soln. of alumina hydrate, binder, and crosslinking agent by continuous mixing)

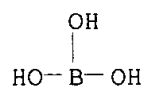
RN 142517-79-1 CAPLUS

CN Boric acid (H3BO3), polymer with ethenol (9CI) (CA INDEX NAME)

CM 1

CRN 10043-35-3

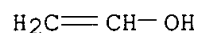
CMF B H3 O3



CM 2

CRN 557-75-5

CMF C2 H4 O



L17 ANSWER 7 OF 42 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 2000:167478 CAPLUS

DOCUMENT NUMBER: 132:180040

TITLE: A mixed fertilizer containing chemical fertilizer and liquid waste generated in papermaking and its manufacture

INVENTOR(S): Lang, Jiawen

PATENT ASSIGNEE(S): Peop. Rep. China

SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, 27 pp.  
 CODEN: CNXXEV

DOCUMENT TYPE: Patent

LANGUAGE: Chinese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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CN 1193618	A	19980923	CN 1997-107398	19970317

AB The fertilizer comprises liq. waste generated in **papermaking** 2-4



part, and chem. fertilizer 4-15 part. It may contain powd. adsorbing substrate 3-5 part. The chem. fertilizer is selected among urea,  $\text{NH}_4\text{H}_2\text{PO}_4$ ,  $(\text{NH}_4)_2\text{HPO}_4$ , nitro-phosphate,  $\text{NH}_4\text{HCO}_3$ ,  $\text{NH}_4\text{Cl}$ ,  $(\text{NH}_4)_2\text{SO}_4$ ,  $\text{NH}_4\text{NO}_3$ ,  $\text{K}_2\text{SO}_4$ ,  $\text{KCl}$ ,  $\text{KH}_2\text{PO}_4$ ,  $\text{KNO}_3$ , calcium superphosphate, Ca-Mg phosphate, triple superphosphate,  $\text{ZnSO}_4$ ,  $\text{FeSO}_4$ , **boric acid**, borax,  $\text{MnSO}_4$ ,  $\text{CuSO}_4$ ,  $(\text{NH}_4)_2\text{MoO}_3$ , and rare earth; and the adsorbing substrate from one or more of bagasse powder, sugar mud, fruit mud, lees, fowl dung, grass powder, straw powder, leaf powder, turf, slag, bentonite, zeolite, kieselguhr, ground phosphate rock, and rare earth, etc. The fertilizer is prepd. by concg. pulp waste liq. to solid with solid content of 20-40%, and/or adding adsorbing substrate, neutralizing by acid/base or fermn. in pile, drying at 40-200.degree. to water content of 10-30%, mixing with chem. fertilizer and/or absorbing substrate, and grinding to 0.01-0.1 mm.

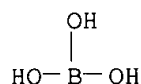
IT 10043-35-3, **Boric acid**, biological studies

RL: AGR (Agricultural use); BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(mixed fertilizer contg. chem. fertilizer and liq. waste generated in **papermaking** and its manuf.)

RN 10043-35-3 CAPLUS

CN Boric acid ( $\text{H}_3\text{BO}_3$ ) (6CI, 8CI, 9CI) (CA INDEX NAME)



L17 ANSWER 11 OF 42 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1997:759880 CAPLUS

DOCUMENT NUMBER: 127:359908

TITLE: Fire-resistant vinyl alcohol polymer-vinyl chloride polymer blend fiber binders and their manufacture and nonwoven fabrics therefrom

INVENTOR(S): Ise, Tomokazu

PATENT ASSIGNEE(S): Kuraray Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 09302521	A2	19971125	JP 1996-116049	19960510

AB The binder fibers are prepd. by spinning solns. contg. blends (A) comprising 60-90 parts vinyl alc. polymers (B) and 10-40 parts vinyl chloride polymers and 1-10 parts fireproofing agents per 100 parts A and 0.5-5% (on B) **boric acid** (I) into an alk. coagulating bath, neutralizing the fibers in an acidic bath, and drawing the fibers to total draw ratio 2-7 to give fibers with denier variation .ltoreq.15%. The fibers are useful for **manuf.** of wallpaper and shoji **paper** (no data). A soln. contg. 70:30 blend of poly(vinyl alc.) (II) and PVC and 5 parts  $\text{SnO}_2$  per 100 parts II-PVC blend and 2% I was spun into a coagulating bath contg.  $\text{NaOH}$ , neutralized in a bath contg.  $\text{H}_2\text{SO}_4$ , and drawn to give fibers with tenacity 4.0 g/denier and limiting oxygen index 35.5%.

L17 ANSWER 16 OF 42 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1996:694305 CAPLUS  
 DOCUMENT NUMBER: 125:303648  
 TITLE: Manufacture of solution for fireproofing and  
 pesticidal and microbicidal protection of waste  
 paper-based insulation material  
 INVENTOR(S): Elges, Wilhelm  
 PATENT ASSIGNEE(S): Germany  
 SOURCE: Ger. Offen., 2 pp.  
 CODEN: GWXXBX  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 19513491	A1	19961017	DE 1995-19513491	19950415
DE 19529963	A1	19970220	DE 1995-19529963	19950814
PRIORITY APPLN. INFO.:			DE 1995-19513491	19950415

AB In the manuf. of cellulosic insulation materials the waste paper is sprayed with a soln. of an additive which penetrates and fireproofs the cellulose fiber and also protects the fiber against pest and microbial attack. The soln. contains borax or boric acid 23, Al hydroxide 7.2, H<sub>2</sub>O 42, and Thymus vulgaris oil 17.8 vol%. Drying of the material after spraying is unnecessary.

L17 ANSWER 21 OF 42 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1989:215060 CAPLUS  
 DOCUMENT NUMBER: 110:215060  
 TITLE: Industrial gypsum for paper manufacture  
 INVENTOR(S): Gussinyer Canadell, Josep Maria  
 PATENT ASSIGNEE(S): Spain  
 SOURCE: Braz. Pedido PI, 18 pp.  
 CODEN: BPXXDX  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Portuguese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
BR 8802524	A	19881220	BR 1988-2524	19880519
ES 2012820	A6	19900416	ES 1987-1702	19870521
PRIORITY APPLN. INFO.:			ES 1987-1702	19870521

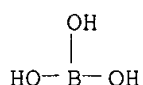
AB Gypsum as byproducts from phosphoric acid manuf., neutralization of SO<sub>3</sub> gas in petroleum refinery, **boric acid** manufg., etc. is useful in **paper manuf.** as filler by adding to pulp together with strong acids (e.g., HClO<sub>3</sub>, H<sub>2</sub>SO<sub>4</sub>, etc.) without neutralizing residual acids.

L17 ANSWER 23 OF 42 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1988:475161 CAPLUS  
 DOCUMENT NUMBER: 109:75161  
 TITLE: Modified glyoxal fiber and paper finishes  
 INVENTOR(S): Hiai, Atsuhiko; Tokunaga, Mareo; Kitano, Nobuhiro  
 PATENT ASSIGNEE(S): Mitsui Toatsu Chemicals, Inc., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 4 pp.  
 CODEN: JKXXAF

DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	JP 63014748	A2	19880121	JP 1986-156221	19860704
	JP 07047560	B4	19950524		
AB	Glyoxal (I) contg. 0.0001 - 1% Group III elements give fiber- and paper-finishing resins with improved whiteness and yellowing resistance. Thus, a mixt. of 1 mol I, 1 mol dimethylurea, and 0.0002% (based on I) AlCl <sub>3</sub> in H <sub>2</sub> O was heated at 40.degree. for 5 h to give a resin (II) soln.. A cotton textile was soaked in an aq. bath contg. II and MgCl <sub>2</sub> , squeezed, dried at 100.degree., and cured at 150.degree. to give a finished textile with whiteness 81.9 and yellowing resistance grade (200.degree., 30 s) 4, vs. 78.5 and 3, resp., for the resin prep. without AlCl <sub>3</sub> .				
IT	<b>10043-35-3, Boric acid</b> (H <sub>3</sub> BO <sub>3</sub> ), uses and miscellaneous RL: USES (Uses) (glyoxal contg., for <b>manuf.</b> of fiber- and <b>paper</b> -finishing resins with improved whiteness and yellowing resistance)				
RN	10043-35-3 CAPLUS				
CN	Boric acid (H <sub>3</sub> BO <sub>3</sub> ) (6CI, 8CI, 9CI) (CA INDEX NAME)				



L17 ANSWER 24 OF 42 CAPLUS COPYRIGHT 2002 ACS  
 ACCESSION NUMBER: 1987:483100 CAPLUS  
 DOCUMENT NUMBER: 107:83100  
 TITLE: Working conditions and ways of their improvement in the manufacture of capacitor and electrolytic paper  
 AUTHOR(S): Garbuz, A. M.; Semenova, V. V.  
 CORPORATE SOURCE: Sanit. Gig. Med. Inst., Leningrad, USSR  
 SOURCE: Gigiena Truda i Professional'nye Zabolevaniya (1987), (5), 30-3  
 CODEN: GTPZAB; ISSN: 0016-9919  
 DOCUMENT TYPE: Journal  
 LANGUAGE: Russian  
 AB In the **prodn.** of dielec. **paper**, the workers are exposed to increased concns. of Al<sub>2</sub>O<sub>3</sub>- and SiO<sub>3</sub>-contg. dust and **boric acid** vapors. The more important occupational factors, however, are high noise levels and biol. stress. There is a relationship between the frequency and intensity of the occupational factors and health disorders in exposed workers.  
 IT **11113-50-1, Boric acid**  
 RL: ADV (Adverse effect, including toxicity); BIOL (Biological study) (occupational exposure to vapors of, health in relation to, in dielec. **paper manuf.**)  
 RN 11113-50-1 CAPLUS  
 CN Boric acid (9CI) (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

L17 ANSWER 25 OF 42 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1987:104112 CAPLUS  
DOCUMENT NUMBER: 106:104112  
TITLE: Fire-resistant and formaldehyde emission-inhibiting  
additives for manufacture of particleboard  
INVENTOR(S): Herr, Alfons K.; Wiehn, Helmut  
PATENT ASSIGNEE(S): Kataflox Patentverwaltungs G.m.b.H., Fed. Rep. Ger.  
SOURCE: Ger. Offen., 12 pp.  
CODEN: GWXXBX  
DOCUMENT TYPE: Patent  
LANGUAGE: German  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	----	-----	-----	-----
AB	DE 3502461	A1	19861009	DE 1985-3502461	19850125
	Fireproofing compns., for manuf. of wood shaving-based particleboard with urea-formaldehyde resins as processing aids, consist of org. fibers (esp. cellulose fibers from <b>paper manuf.</b> ) contg. deposited urea, <b>boric acid</b> particles, and, addnl., CaSO <sub>4</sub> particles. The compns. are used directly in the manuf. of particleboards. In addn. to imparting a fire resistance to the boards, the compns. also inhibit emissions of HCHO from the finished product. A compn. was prepd. from fibers from wastewater clarification (from <b>paper manuf.</b> ) 250, urea (as 60% aq. soln.) 50, colemanite 725, and partially concd. H <sub>2</sub> SO <sub>4</sub> 560 kg; the reaction mixt. was then concd. and milled to obtain granules.				

L17 ANSWER 27 OF 42 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1985:551030 CAPLUS  
DOCUMENT NUMBER: 103:151030  
TITLE: Preparation of thermal recording paper  
PATENT ASSIGNEE(S): Nippon Kayaku Co., Ltd., Japan  
SOURCE: Jpn. Kokai Tokkyo Koho, 3 pp.  
CODEN: JKXXAF  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	----	-----	-----	-----
AB	JP 60101076	A2	19850605	JP 1983-209100	19831109
	Title prepn. comprises treating a thermosensitive coloring layer contg. a leuco dye, a color developer, and poly(vinyl alc.) with an aq. soln. of <b>boric acid</b> . The <b>prepn.</b> provides a thermal recording <b>paper</b> having improved water resistance and heat response, compared to that prepd. by treating with an alk. metal borate. Thus, a paper support was coated with an aq. dispersion contg. 3'-diethylamino-7'-(o-fluoroanilino)fluoran, poly(vinyl alc.), Bisphenol A, stearamide, CaCO <sub>3</sub> , and Na dodecylbenzenesulfonate, then dipped in an aq. soln. of <b>boric acid</b> , and dried to give a thermal recording paper having improved water resistance compared to that prepd. by treating with Na tetraborate instead of the <b>boric acid</b> .				

L17 ANSWER 28 OF 42 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1984:105403 CAPLUS

KOROMA EIC1700

DOCUMENT NUMBER: 100:105403  
TITLE: Paper pulp for capacitor paper production  
INVENTOR(S): Mitkova, V. V.; Guzeev, V. I.; Zaplatina, V. M.;  
Vaisman, L. M.; Soldatenko, V. I.; Yakimuk, V. G.;  
Andreev, G. N.; Ratnikov, V. I.  
PATENT ASSIGNEE(S): Ukrainian Scientific-Research Institute of the  
Cellulose-Paper Industry, USSR  
SOURCE: U.S.S.R. From: Otkrytiya, Izobret., Prom. Obraztsy,  
Tovarnye Znaki 1983, (39), 124.  
CODEN: URXXAF  
DOCUMENT TYPE: Patent  
LANGUAGE: Russian  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	---	-----	-----	-----
	SU 1049602	A1	19831023	SU 1979-2796749	19790713
AB	To improve beating and paper-forming properties of pulp with increased .alpha.-cellulose content, swelling was carried out in an aq. soln. of O-contg. acid with a 10-3-10-10 dissocn. const. selected from a group contg. H3PO4, AcOH [64-19-7], or H3BO3, with a concn. 0.01-1% in an amt. equal to 0.5-10 wt.% of abs. dry fiber.				
IT	<b>11113-50-1</b>				
	RL: USES (Uses)				
	(cellulose pulp swollen with, for <b>manuf.</b> of capacitor <b>paper</b> )				
RN	11113-50-1	CAPLUS			
CN	Boric acid (9CI)	(CA INDEX NAME)			

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

L17 ANSWER 29 OF 42 CAPLUS COPYRIGHT 2002 ACS  
ACCESSION NUMBER: 1983:480090 CAPLUS  
DOCUMENT NUMBER: 99:80090  
TITLE: Composition of light-sensitive diazo copying paper coating  
INVENTOR(S): Shtreis, G. B.; Gofman, A. M.; Smyslov, V. M.;  
Shcherbin, L. A.; Kononenko, V. N.; Tkach, L. N.  
PATENT ASSIGNEE(S): Central Scientific-Research Institute of Paper, USSR;  
Malin Paper Factory  
SOURCE: U.S.S.R. From: Otkrytiya, Izobret., Prom. Obraztsy,  
Tovarnye Znaki 1983, (20), 42.  
CODEN: URXXAF  
DOCUMENT TYPE: Patent  
LANGUAGE: Russian  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

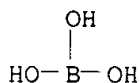
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	---	-----	-----	-----
	SU 1020256	A1	19830530	SU 1981-3375272	19811230
AB	Photosensitive copying paper compn. contains the polycondensation product of resorcinol with formaldehyde 0.2-1.2 (molar ratio of 1.2:1.0 to 1.7:1.0), p-diazodiethylaniline of 4-diazo-2,5-dialkyloxyphenylmorpholine 0.7-0.3, citric acid 1.0-3.0, boric acid 0.4-1.2, thiourea 0.2-0.9, ZnCl2 0.2-0.9, ethylcellulose 2.0-5.0, and EtOH 84.8-95.3 wt.%.				
IT	<b>10043-35-3</b> , properties				
	RL: USES (Uses)				

KOROMA EIC1700

(photosensitive compn. for copying **paper prepn.**  
contg. diazo compd. and)

RN 10043-35-3 CAPLUS

CN Boric acid (H3BO3) (6CI, 8CI, 9CI) (CA INDEX NAME)



L17 ANSWER 30 OF 42 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1983:36405 CAPLUS

DOCUMENT NUMBER: 98:36405

TITLE: Apparatus and methods for cellulose-based electrical insulation

INVENTOR(S): Koptyukh, L. A.; Volkov, E. E.; Ratnikov, V. I.;  
Skurat, S. A.; Koikov, G. I.; Veprev, L. P.;  
Strugovets, N. A.PATENT ASSIGNEE(S): Ukrainian Scientific-Industrial Enterprises of the  
Cellulose-Paper Industry, USSR; "Krasnyi Kursant"  
Paper Factory

SOURCE: Fr. Demande, 24 pp.

CODEN: FRXXBL

DOCUMENT TYPE: Patent

LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2502206	A1	19820924	FR 1982-4872	19820322
FR 2502206	B1	19860425		
FI 8200987	A	19820924	FI 1982-987	19820322
DE 3210671	A1	19821021	DE 1982-3210671	19820323
DE 3210671	C2	19831013		
JP 57205591	A2	19821216	JP 1982-46201	19820323
PRIORITY APPLN. INFO.:			SU 1981-3267994	19810323
			SU 1981-3296313	19810528

AB In the title process, cellulose pulp is formed into a sheet and treated with a soln. of H3BO3 during pressing of excess moisture from the sheet. Thus, a sheet was formed from a softwood sulfate pulp (concn. 0.20%, Schopper-Riegler fineness 97.9.degree., temp. 36.degree.) and treated at a moisture content of 74% with a soln. of 1.3% H3BO3 at 20.degree. as the water was removed to give a dry, 10.2-.mu. sheet with breaking length 9800 m, breakdown voltage 480 V, tan dielec. loss angle 0.10 and 0.08 at 20 and 100.degree., and concn. of conductive inclusions 5/m2, compared with 22 inclusions/m2 when a soln. of 6% H3BO3 at 65.degree. was added to a sheet contg. 14% moisture.

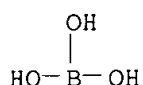
IT 10043-35-3, uses and miscellaneous

RL: USES (Uses)

(cellulose pulp treatment with, in elec. insulating **paper**  
**manuf.**)

RN 10043-35-3 CAPLUS

CN Boric acid (H3BO3) (6CI, 8CI, 9CI) (CA INDEX NAME)



L17 ANSWER 31 OF 42 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1982:152853 CAPLUS

DOCUMENT NUMBER: 96:152853

TITLE: Security paper with authentic marks

INVENTOR(S): Kaule, Wittich; Schwenk, Gerhard; Stenzel, Gerhard

PATENT ASSIGNEE(S): Gesellschaft fuer Automation und Organisation m.b.H.,  
Fed. Rep. Ger.

SOURCE: Ger. Offen., 17 pp.

CODEN: GWXXBX

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 3116257	A1	19820107	DE 1981-3116257	19810423
DE 3116257	C2	19890713		
WO 8103511	A1	19811210	WO 1981-DE82	19810529
W: AT, CH, GB, JP, SE, US				
RW: FR, LU, NL				
JP 57500698	T2	19820422	JP 1981-501678	19810529
JP 02055560	B4	19901127		
EP 53125	A1	19820609	EP 1981-901314	19810529
EP 53125	B1	19840328		
R: FR, LU, NL				
GB 2089384	A	19820623	GB 1982-2186	19810529
GB 2089384	B2	19840830		
AT 8109005	A	19841215	AT 1981-9005	19810529
AT 378384	B	19850725		
CH 655890	A	19860530	CH 1982-60	19810529
SE 8107671	A	19811221	SE 1981-7671	19811221
SE 450780	B	19870727		
SE 450780	C	19871105		

PRIORITY APPLN. INFO.: DE 1980-3020653 19800530

WO 1981-DE82 19810529

AB To test bank notes, documents, or the like for genuineness they are printed with an ink contg. pigments, whose magnetic and IR-absorbing properties. are detd., or fibers in the paper pulp may be coated with such pigments. Their IR absorption drops sharply at the short wavelengths boundary of the visible range to approach that of the paper support. Preferably ferrimagnetic garnet compds.  $\text{M}_3\text{Fe}_5\text{O}_{12}$ , (M = rare earth metal or Bi) are utilized. Doping them with another rare earth metal results in a fluorescent emission, which also can serve as valuable indicator. Transmission in the visible area can be improved by replacing part of the Fe by other elements such as Ca, Mg, Ba, or Al, or by compds.  $\text{M}_3\text{-xM}'\text{xFe}_5\text{-xM}''\text{xO}_{12}$  (M' = Ca, Mg, Zn, Cd; M'' = Si, Ge, Sn, Te; x = 0-3). Also suitable are  $\text{FeBO}_3$  and  $\text{FeF}_3$ , as well as  $\text{Li}_{0.5}\text{Fe}_{2.5}\text{O}_4$  and  $\text{MgFe}_2\text{O}_4$ . Thus,  $\text{Gd}_3\text{Fe}_5\text{O}_{12}$  was obtained by sintering  $\text{Gd}_2\text{O}_3$  108.75,  $\text{Fe}_2\text{O}_3$  79.8, and  $\text{Na}_2\text{SO}_4$  70 g in a corundum crucible for 10 h at 1000.degree., grinding, and heating 10 more h at 1100.degree.. Regrinding and washing out the  $\text{Na}_2\text{SO}_4$  flux left a green 1.mu. powder of adequate IR transparency. Fluorescence

emission at 1.5  $\mu$ . was obtained by doping, using in the above mixt. Gd<sub>2</sub>O<sub>3</sub> 101.58 and Er<sub>2</sub>O<sub>3</sub> 7.65 g (instead of Gd<sub>2</sub>O<sub>3</sub> 108.75 g).

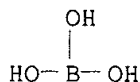
IT 20542-97-6

RL: USES (Uses)

(in **prepn.** of security **paper**)

RN 20542-97-6 CAPLUS

CN Boric acid (H<sub>3</sub>BO<sub>3</sub>), iron(3+) salt (1:1) (8CI, 9CI) (CA INDEX NAME)



Fe(III)

L17 ANSWER 32 OF 42 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1981:445073 CAPLUS

DOCUMENT NUMBER: 95:45073

TITLE: Cold-hardenable poly(vinyl alcohol) adhesive composition for paper and paperboard

INVENTOR(S): Sumi, Masao; Suenaga, Junichi; Takenaka, Masazo; Murano, Itaru; Tanabe, Mikio; Hirai, Kiyoshi

PATENT ASSIGNEE(S): Unitika Ltd. , Japan; Okayama Papermill Co., Ltd.

SOURCE: Ger. Offen., 33 pp.

CODEN: GWXXBX

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 3042850	A1	19810521	DE 1980-3042850	19801113
DE 3042850	C2	19901122		
JP 56070074	A2	19810611	JP 1979-146820	19791113
JP 01012793	B4	19890302		
CA 1185031	A1	19850402	CA 1980-364420	19801112
FR 2469439	A1	19810522	FR 1980-24158	19801113
FR 2469439	B1	19851004		
GB 2087916	A	19820603	GB 1980-36432	19801113
GB 2087916	B2	19840118		
US 4442252	A	19840410	US 1982-366619	19820408
PRIORITY APPLN. INFO.:			JP 1979-146820	19791113
			US 1980-206605	19801113

AB Mixts. of poly(vinyl alc.) (I) [9002-89-5], a filler, a water-sol. boron compd., and water are prepd. which are liq. at .gtoreq.60.degree., gel reversibly when cooled, and are useful as adhesives for **paper**, esp. in the **manuf.** of corrugated paperboard. Thus, a mixt. of I (d.p. 1680, 98.6% sapon.) 35, CaCO<sub>3</sub> 64.5, and **boric acid** 0.5 part was treated with steam to prep. a soln. (18% solids, viscosity 300 cP at 60.degree.) which gelled during cooling from 60.degree. to 20.degree.. The soln. was heated to 70.degree. and used to bond paper (gel time 20 s), giving bond strengths exceeding the cohesive strength of the paper.



L17 ANSWER 34 OF 42 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1980:182817 CAPLUS

DOCUMENT NUMBER: 92:182817

TITLE: Aminoplast resin particles and their use in paper products

INVENTOR(S): Henbest, Richard Georg Cleveland; Harrison, John

PATENT ASSIGNEE(S): Imperial Chemical Industries Ltd., UK

SOURCE: Eur. Pat. Appl., 14 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 5905	A1	19791212	EP 1979-300710	19790426
EP 5905	B1	19821020		
R: DE, FR, GB, IT, NL, SE				
NO 7901479	A	19791203	NO 1979-1479	19790503
US 4284759	A	19810818	US 1979-35643	19790503
CA 1126438	A1	19820622	CA 1979-327272	19790509
AU 7947115	A1	19791206	AU 1979-47115	19790516
AU 526664	B2	19830127		
FI 7901672	A	19791201	FI 1979-1672	19790525
JP 54157197	A2	19791211	JP 1979-66713	19790529
			GB 1978-25658	19780531

PRIORITY APPLN. INFO.:

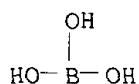
AB Urea-formaldehyde copolymers (I) contg. 0.2-15 inorg. oxyacid radicals (sulfite, phosphate, phosphite or borate)/100 methylene radicals are gelled in an extended form, dried, and crosslinked to give an aminoplast pigment having surface area  $\geq 5 \text{ m}^2/\text{g}$ , which can be used in paper manuf. without strength loss. Thus, 5 parts  $\text{Na}_2\text{SO}_3$  and 186 parts  $\text{Na}_2\text{S}_2\text{O}_5$  were refluxed with the condensate of 3560 parts 36%  $\text{HCHO}$  and 1303 parts urea at pH 9 and then at pH 4.85 and vacuum distd. to give a 65% solids modified I having 4.6 sulfite radicals/100 methylene radicals. The modified I (100 parts) was mixed with 255 parts 3.3%  $\text{H}_3\text{PO}_4$  soln., gelled in a casting mold, dried, heat-cured, and ground in water to give a pigment having particle size  $< 100 \text{ .}\mu\text{.}$ , surface area  $12 \text{ m}^2/\text{g}$ , and d.  $0.47 \text{ g/cm}^3$ . The pigment was added to sulfate pulp to give paper having burst index  $3.54 \text{ kNg-l}$ , compared with  $2.99$  for paper contg. the unmodified aminoplast.

IT 10043-35-3D, reactions products with urea resin and borax

RL: USES (Uses)

(pigments, for manuf. of paper)

RN 10043-35-3 CAPLUS

CN Boric acid ( $\text{H}_3\text{BO}_3$ ) (6CI, 8CI, 9CI) (CA INDEX NAME)

L17 ANSWER 35 OF 42 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1980:133957 CAPLUS

DOCUMENT NUMBER: 92:133957

TITLE: Fibrous fire-resistant agent

PATENT ASSIGNEE(S): Kataflox Patentverwaltungs G.m.b.H., Fed. Rep. Ger.

KOROMA EIC1700

SOURCE: Belg., 11 pp.  
 CODEN: BEXXAL  
 DOCUMENT TYPE: Patent  
 LANGUAGE: French  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
BE 877648	A1	19791105	BE 1979-57951	19790712
DE 2831633	A1	19800207	DE 1978-2831633	19780719
DE 2831633	C2	19840809		
AT 7903949	A	19830315	AT 1979-3949	19790530
AT 372697	B	19831110		
FI 7901828	A	19800120	FI 1979-1828	19790607
FI 66193	B	19840531		
FI 66193	C	19840910		
SE 7905231	A	19800120	SE 1979-5231	19790614
SE 445356	B	19860616		
SE 445356	C	19860925		
NO 7902291	A	19800122	NO 1979-2291	19790710
NO 148449	B	19830704		
NO 148449	C	19831012		
FR 2431469	A1	19800215	FR 1979-18514	19790711
GB 2026055	A	19800130	GB 1979-24696	19790716
GB 2026055	B2	19820902		
CH 640811	A	19840131	CH 1979-6604	19790716
US 4285842	A	19810825	US 1979-58320	19790717
DK 7903014	A	19800120	DK 1979-3014	19790718
CA 1125583	A1	19820615	CA 1979-332098	19790718
			DE 1978-2831633	19780719

## PRIORITY APPLN. INFO.:

AB Fiber-contg. wastes from **paper**, carton, or cardboard **manuf.** is mixed with a finely-divided mineral contg. **boric acid** and optionally with ingredients that on fusing would form glasses or ceramics. Concd. H<sub>2</sub>SO<sub>4</sub> is injected and the mixing is continued. The granulate is partially dried and ground in a centrifugal grinder to sep. the fibers. Thus, a turbine mixer was charged discontinuously with 120 waste from **papermaking** (contg. 33% solids) and 172 kg colemanite [1318-33-8], mixed for 4 min, mixed with 73 kg 96% H<sub>2</sub>SO<sub>4</sub> in 1 min, mixed for 2 min, partially dried, sepd., and dried to 3-4% water. The product consisted of fibers coated with a mixt. of **boric acid**, CaSO<sub>4</sub>, and paper manufg. wastes.

IT 11113-50-1P

RL: PREP (Preparation)

(coatings, on ceramic fire-resistant fibers prepd. from colemanite and **paper making** waste)

RN 11113-50-1 CAPLUS

CN Boric acid (9CI) (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

L17 ANSWER 36 OF 42 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1978:461312 CAPLUS

DOCUMENT NUMBER: 89:61312

TITLE: Material based on formaldehyde resin in fiber form

INVENTOR(S): Henbest, Richard George; McGregor, Kenneth

PATENT ASSIGNEE(S): Imperial Chemical Industries Ltd., UK

SOURCE: Ger. Offen., 23 pp.

CODEN: GWXXBX

KOROMA EIC1700

DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 2  
 PATENT INFORMATION:

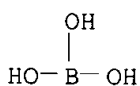
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2754525	A1	19780615	DE 1977-2754525	19771207
GB 1573114	A	19800813	GB 1976-51199	19761208
NO 7704084	A	19780609	NO 1977-4084	19771129
NO 149668	B	19840220		
NO 149668	C	19840530		
SE 7713897	A	19780609	SE 1977-13897	19771207
SE 432115	B	19840319		
SE 432115	C	19840628		
NL 7713522	A	19780612	NL 1977-13522	19771207
FR 2373617	A1	19780707	FR 1977-36816	19771207
FR 2373617	B1	19810522		
JP 53086795	A2	19780731	JP 1977-147010	19771207
CA 1161593	A1	19840131	CA 1979-321607	19790215
PRIORITY APPLN. INFO.:			GB 1976-51199	19761208
			GB 1977-51199	19771123

AB Fibrils, prepd. from urea-formaldehyde copolymers contg. inorg. O acid groups, are used to manuf. synthetic paper giving, esp. in combination with mech. wood pulp, paper of good properties and improved burst index. Thus, formalin (HCHO 36.5%, MeOH 6.5%) 3267 mL was adjusted to pH 7.2, urea 1303, Na<sub>2</sub>SO<sub>3</sub>·7H<sub>2</sub>O 20, and Na<sub>2</sub>S<sub>2</sub>O<sub>5</sub> 186 g were added, the mixt. was polymd., treated with (NH<sub>4</sub>)<sub>2</sub>HPO<sub>4</sub>, and fibrillated with air to give fibrils which could be easily made into paper, while sulfite-free fibrils could not be removed from the wire screen.

IT 10043-35-3D, reaction products with formaldehyde-urea copolymer  
 RL: USES (Uses)  
 (fibrils, for manuf. of synthetic paper)

RN 10043-35-3 CAPLUS

CN Boric acid (H<sub>3</sub>BO<sub>3</sub>) (6CI, 8CI, 9CI) (CA INDEX NAME)



L17 ANSWER 37 OF 42 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1975:430243 CAPLUS

DOCUMENT NUMBER: 83:30243

TITLE: Paper additives

INVENTOR(S): Davidson, Richard Robertson

PATENT ASSIGNEE(S): Associated Portland Cement Manufacturers Ltd., UK

SOURCE: Fr. Demande, 11 pp.

CODEN: FRXXBL

DOCUMENT TYPE:

Patent

LANGUAGE:

French

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2233441	A1	19750110	FR 1974-21002	19740617

KOROMA EIC1700

GB 1462377	A	19770126	GB 1973-28840	19730618
FI 7401854	A	19741219	FI 1974-1854	19740617
NO 7402186	A	19741219	NO 1974-2186	19740617
NO 141375	B	19791119		
NO 141375	C	19800227		
DK 7403233	A	19750210	DK 1974-3233	19740617
SE 415045	B	19800901	SE 1974-7951	19740617
SE 415045	C	19801218		
ES 427395	A1	19760716	ES 1974-427395	19740618

PRIORITY APPLN. INFO.:

GB 1973-28840 19730618

AB The neutralization problems inherent in the use of natural fillers capable of reacting with acids in **paper manuf.** were overcome by prepg. a filler suspension in which a paper additive, e.g. alum, Zr salt, or **boric acid**, capable of causing gelling of a hydrophilic polymer at increased pH, was added to an aq. soln. of the polymer followed by the neutralizing filler to give a colloidal suspension with a stable acid pH. Thus, 5 g starch was dissolved at 80.degree. in 100 ml H2O and 0.5 ml of a 10% alum soln. was added to give pH 4. A suspension of 100 g calcite [13397-26-7] in 50 ml H2O was added to the starch soln. On an acid resistance test the pH of the colloidal suspension was 4.65 after 3 min. Poly(vinyl alc.) [9002-89-5] was also used as the hydrophilic polymer.

L17 ANSWER 42 OF 42 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1908:1148 CAPLUS

DOCUMENT NUMBER: 2:1148

ORIGINAL REFERENCE NO.: 2:331g-h

TITLE: The Effect of Using Parchment Paper on the Quality of Butter

AUTHOR(S): Burr, Anton

SOURCE: Illus. landw. Ztg. (1907) 475-6

DOCUMENT TYPE: Journal

LANGUAGE: Unavailable

AB The author calls attention to the fact that much of the parchment paper on the market contains lead, e. g., as much as 3960.5 mg. per kg. of paper. Such paper, besides being poisonous, may discolor the butter. **Boric acid** is sometimes added to the paper. Poor paper is often the cause of poor butter, a bad flavor being noticed where the paper comes in contact with the butter. Sugar, Fe, Mg and Ca salts are also often used in the **manufacture** of wrapping **paper** of this sort.